

### **Remarks**

The Final Office Action dated May 29, 2008, indicated the following objections and rejections: the drawings were objected to under 37 C.F.R. § 1.83(a) for allegedly failing to show every feature of claim 18; claims 1, 3, 6, 7, 9, 12-14 and 16 were rejected under 35 U.S.C. § 102(e) over the Tracy reference (U.S. Pub. No. 2004/0252062); claims 2 and 8 were rejected under 35 U.S.C. § 103(a) over Tracy in view of the Hayes reference (U.S. Pat. No. 6,662,028); claims 4 and 10 were rejected under 35 U.S.C. § 103(a) over Tracy; claims 5 and 11 were rejected under 35 U.S.C. § 103(a) over Tracy in view of the Boyle reference (U.S. Pub. No. 2003/0016179); and claims 15 and 17-20 were rejected under 35 U.S.C. § 103(a) over Tracy in view of the Poilasne reference (U.S. Pub. No. 2004/0095281). Applicant notes that the objection to claim 7 for informalities (indicated in the Final Office Action) appears to have been withdrawn by entry of Applicant's amendment of July 10, 2008.

Applicant respectfully traverses each of these objections and rejections and, unless explicitly stated by the Applicant, does not acquiesce to any objection, rejection or averment made in the Office Action.

With regard to the objection to the drawings, Applicant submits that claim elements are required to be shown in the drawings only as necessary for the understanding of the subject matter sought to be patented. *See* 37 C.F.R. § 1.81(a). Furthermore, 37 C.F.R. § 1.83(a) states that, "conventional features disclosed in the description and claims, where their detailed illustration is not essential for a proper understanding of the invention, should be illustrated in the drawing in the form of a graphical drawing symbol or a labeled representation." Applicant submits that the drawing fully complies with these requirements in that Fig. 3, along with paragraph 0021, indicates where the recited part of the bandwidth broadening resonant circuit may be located (at boxes 32 or 34, between a feed pillar 24, 26 and the shorting pillar 22), and indicates the circuit board (14) on which the remaining portion of the bandwidth broadening resonant circuit resides. The exact details of the bandwidth broadening resonant circuit are not required to be shown in the drawings to understand the recited subject matter. *See*, M.P.E.P. § 608.02(d).

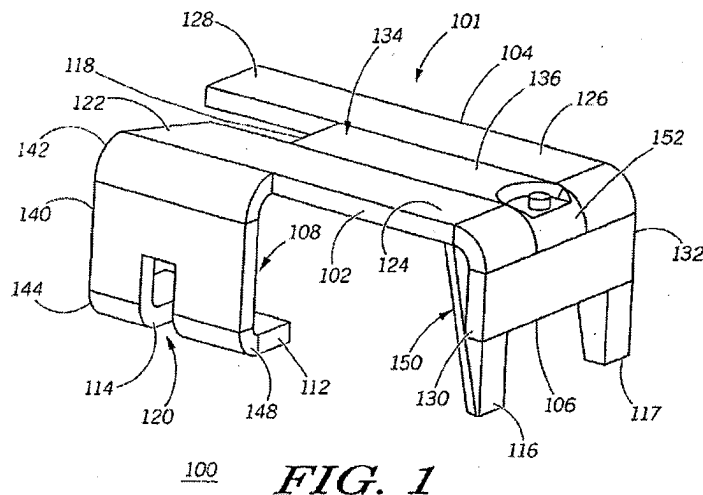
In the Advisory Action dated July 30, 2008, the Examiner stated that in Applicant's Fig. 3, there are only areas 32 and 34, and that no portion of a bandwidth broadening resonant circuit is shown residing in those areas. Such a statement fails to address the substance of Applicant's argument. The Examiner has not explained why additional details of the bandwidth broadening resonant circuit would be needed to understand the claimed subject matter, nor has the Examiner explained what details would be sufficient. As prescribed in 37 C.F.R. § 1.83(a), a detailed illustration of conventional features need not be shown so long as the drawings indicate the feature by graphical symbol or labeled representation, which Applicant's drawings clearly provide.

For at least these reasons, Applicant submits that the objection to the drawings is improper.

The § 102 rejection of claims 1, 3, 6, 7, 9, 12-14 and 16 over the Tracy reference is improper because there is no correspondence between the teachings of Tracy and several of the aspects recited in Applicant's claims. In particular, the Tracy reference does not disclose the claimed features relating to the following: (A) a self supporting member that includes a feed pillar and a shorting pillar; (B) a self supporting member having at least one feed pillar and a shorting pillar that provide support; or (C) a pressure connection between an antenna and an antenna interface of a self supporting member. The failings of the Tracy reference with respect to each of these features is discussed below. Additionally, it should be noted that neither the Final Office Action nor the Advisory Action included any identification of correspondence between the teachings of Tracy and a pressure connection between an antenna and an antenna interface, as claimed.

The Examiner identified feed element 108 of Tracy's Fig. 1 (reproduced below) as corresponding to the claimed self supporting member. Applicant finds no teaching or suggestion in the Tracy reference to support an interpretation that the feed element 108 is self supporting. Tracy describes feed element 108 as including a conductive sheet 140 that extends between the connector 142 and the contacts 112 and 114, but includes no discussion or mentioning that the conductive sheet 140 (or any other part of feed element 108) provides or could provide structural support for the antenna, much less hold itself in position without being attached to the antenna. It appears that the only mention of a

support structure in the Tracy reference is support structure 150 (*see, e.g., Tracy* paragraph 0021, and Fig. 1).



**Fig. 1 of the Tracy reference**

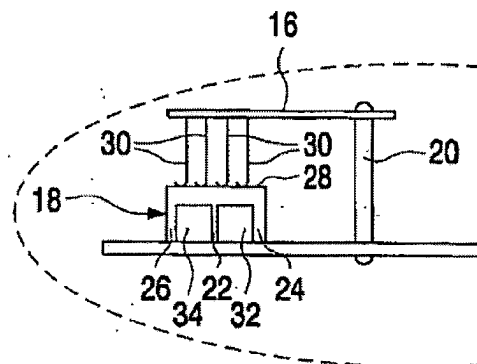
The Advisory Action responds by arguing that the feed element 108 in Fig. 1 of Tracy has the same structure as the self supporting member recited in Applicant's claims, and therefore the feed element 108 is considered to be self supporting. Applicant disagrees on both counts. Tracy's feed element 108 does not have the same structure because it does not include a feed pillar separate from a shorting pillar, and each extending from an rf circuit board to an antenna interface. The Examiner appears to have acknowledged as such in the Advisory Action by identifying conductive sheet 140 as constituting part of both the recited feed pillar and shorting pillar. Applicant therefore submits that Tracy's feed element 108 does not have the same structure as recited in Applicant's claims. Applicant further submits that the property of being self supporting does not necessarily follow from a particular arrangement or structure. For example, the conductive sheet 140 shown in Tracy may be constituted as a thin sheet that cannot support itself in the configuration shown above without the antenna arrangement being supported by support structure 150.

For at least these reasons, Applicant submits that Tracy does not teach the claimed self supporting member that includes a feed pillar and a shorting pillar.

Furthermore, the Tracy reference does not disclose a feed pillar and a shorting pillar that provide support, as claimed. The Examiner identifies Tracy's feed contact 112 and ground contact 114 as corresponding to the recited feed pillar and shorting pillar. However, Applicant observes that Tracy teaches that the feed contact 112 and ground contact 114 provide contact pad functionality, and does not teach that these provide any support function. Moreover, the Examiner finds no correspondence in Tracy for the feed contact 112 and ground contact 114 extending from the rf circuit to an antenna interface, as claimed. Extension to the antenna interface is provided by conductive sheet 140, which does not constitute separate feed and shorting pillars, and which is not taught by Tracy to provide support.

For at least these reasons, Applicant submits that Tracy does not teach the claimed support provided by the feed pillar and shorting pillar.

Moreover, the Tracy reference does not disclose an antenna connected to an antenna interface by a pressure connection, as claimed. Applicant finds nothing in the Tracy reference to teach or suggest the existence or desirability of any pressure connection, much less a pressure connection between the antenna and the antenna interface (*see, e.g.*, spring contacts 30 connecting antenna 16 to antenna interface 28 in the portion of Applicant's Fig. 3 reproduced below). As indicated above, the Examiner has provided no specific indication of correspondence for the claimed pressure connection features at all.



**Portion of Applicant's Fig. 3**

For at least these reasons, Applicant submits that Tracy does not teach the claimed pressure connection.

Applicant therefore submits that the § 102 rejection is improper because the Tracy reference fails to teach numerous features recited in Applicant's claims.

The remaining § 103(a) rejections were based on the Tracy reference alone (as to claims 4 and 10), and in combination with Hayes (as to claims 2 and 8), Boyle (as to claims 5 and 11), and Poilasne (as to claims 15 and 17-20). Applicant submits that each of these rejections is improper because none of the proposed combinations or modifications overcome the numerous deficiencies presented by the primary Tracy reference, as noted above, and because no valid reason to make the proposed modifications has been presented. For example, the Hayes reference is introduced in an attempt to address the admitted failure of Tracy to disclose the claimed features relating to a dual band, dual feed antenna and where the self supporting member has two feed pillars, one positioned on each side of the shorting pillar. However, none of the feed or ground connections indicated in the Hayes reference are taught to provide a support function. Likewise, neither the Boyle reference nor the Poilansne reference appears to provide any teaching to address the insufficiencies of the Tracy reference in a manner that would lead one of skill in the art to make the claimed invention.

For at least these reasons, Applicant submits that the § 103 rejections are improper.

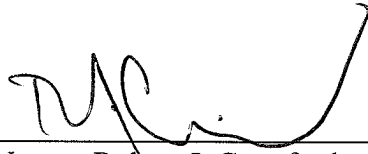
Applicant further submits that the art of record fails to disclose the features additionally recited in newly-added claim 21. In particular, the cited references do not teach or suggest that an area between the at least one feed pillar and the shorting pillar is adapted to accommodate at least part of a bandwidth broadening resonant circuit, as recited in claim 21.

In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Aaron Waxler, of NXP Corporation at (408) 474-9068 (or the undersigned).

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